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REMARKS

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Reconsideration of the application in light of the amendments and the following remarks is respectfully requested.

Claims 1-57 are pending.

Status of the Specification

The Examiner has objected to the title for not being descriptive. Applicants have amended the title to "COMPACT PORTABLE ELECTRIC HEATER WITH HIGH THERMAL OUTPUT."

The Examiner has objected to the disclosure for containing features of claims 14 and 35 which are not described in the specification. Accordingly, the Specification has been amended to describe the feature of forming air inlets or air outlets by a punch press process. This feature is disclosed in claims 14 and 35 as originally filed and Applicants submit that the feature is part of the original disclosure. No new matter is added. Applicants request withdrawal of the objection.

Rejection Under 35 U.S.C. § 103

Claims 1-3, 6, 8, 9, 11, 13, 15, 20, 22, 23, 25, 27, 28, 30, 32, 34, 36, and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 1,827,788 to Hicks. Applicants respectfully traverse the rejection.

The Examiner contends that Hicks discloses a portable electric heater comprising a housing, an inlet at the bottom of the housing, an outlet at the top of the housing covered by a grille, and a baffle 20, which surrounds an electric heater 19, so that heated air flowing via natural convection through the housing and heat radiated from a heater tube 17 are confined within the baffle. (Hicks, Figure 1.) Further, the Examiner contends that "the claims differ from Hicks in calling for a plurality of baffles" and that "no criticality is seen in the use of multiple baffles in lieu of a single baffle." (Office Action, page 3.) Additionally, the Examiner contends

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that Hicks discloses a portable heater of "relatively small size . . . (e.g., it could be set on a small end table), it is readily apparent that its volume would be 'less than 16,500 ccm.'" (Office Action, page 5.)

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Applicants submit that because Hicks lacks the proper motivation, and because the Examiner finds that motivation in the present application, the Examiner's burden to prove a *prima facie* case of obviousness has not been met. Claim 1 recites a portable electric heater comprising "a plurality of baffles" and claim 15 recites a portable electric heater comprising "at least two substantially vertical baffles." Applicants submit that Hicks does not provide any motivation for a person of ordinary skill in the art to create a heater with more than one baffle. Hicks discloses a baffle 20 which is tubular and deeply corrugated. The baffle 20 is concentric with, and surrounds, the heating tube 17. Hicks discloses a single baffle of unitary construction, and does not disclose or suggest a plurality of baffles. The Examiner acknowledges that "the claims differ from Hicks (US1827788) in calling for a plurality of baffles within the housing." (Office Action, page 3.) The Examiner quotes page 7, lines 9-13, of the present application for support that the baffles "may be made in any suitable way' and can 'have one or more parts.'" (Office Action, pages 3-4,) Applicants submit that the Examiner has impermissibly looked to the disclosure of the present invention to supply the necessary motivation which is lacking from Hicks. Thus, the Examiner has not met the burden of proving a *prima facie* case of obviousness.

Claims 2, 3, 6, 8, 9, 11 and 13 depend from claim 1, and Applicants submit that claims 2, 3, 6, 8, 9, 11 and 13 are patentable over Hicks for at least the same reasons as claim 1. Claims 20, 22, 23 and 25 depend from claim 14, and Applicants submit that claims 20, 22, 23 and 25 are patentable over Hicks for at least the same reasons as claim 15.

Independent claim 27 recites a portable electric heater having "a volume of less than about 18,000 ccm" and claims 22, 23 and 24 also recite specific volumes for the portable heater. The Examiner acknowledges that "the volume of the housing is not expressly stated in the prior art." However, the Examiner contends that Hicks discloses a "relatively small size" portable heater. (Office Action, page 5.) Applicants respectfully disagree with the Examiner's

reading of Hicks and submit that Hicks discloses that the stand 12 supports the heater (vase 11) from the floor. (Hicks, Figure 1.) Additionally, Hicks discloses that "[t]he units themselves are of course of considerable size." (Hicks, page 2, lines 76-78.) Thus, Hicks discloses floor standing heaters of considerable size. Because Hicks teaches away from compact portable electric heaters, Applicants submit that Hicks lacks the motivation for a person of ordinary skill in the art to achieve the present invention of claims 22, 23, 24 and 27. Thus, the Examiner has not met the burden of proving a *prima facie* case of obviousness.

Claims 28, 30, 32, 34, 36 and 37 depend from claim 27, and Applicants submit that claims 27, 28, 30, 32, 34, 36 and 37 are patentable over Hicks for at least the same reasons as claim 27.

For the foregoing reasons, Applicants request withdrawal and reconsideration of the rejection.

Claims 4, 5, 10, 16, 17, 24, 29 and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hicks in view of U.S. Patent No. 2,823,291 to Fiandt. The Examiner contends that Fiandt discloses a safety device 10 that de-energizes the electric heater responsive to excessive temperatures. Applicants respectfully traverse the rejection.

Claims 4, 5 and 10 depend from claim 1. Claims 16, 17 and 24 depend from claim 15. Claims 29 and 33 depend from claim 27. Applicants submit that the combination of Hicks and Fiandt does not disclose or suggest the invention of claims 1, 15 and 27 for the reasons discussed above with respect to Hicks. Therefore, Applicants submit that claims 4, 5, 10, 16, 16, 24, 29 and 33 are patentable over the combination of Hicks and Fiandt for at least the same reasons as their respective base claims.

Additionally, claims 4, 5, 16, 17, and 29 include "a safety device that causes heat output by the heating element to be reduced when an overheat condition is detected." Applicants submit that Fiandt discloses a thermostat instrument 10 which has a manually adjustable dial 18. The thermostat disclosed in Fiandt regulates temperature within a range set by a user. In contrast, the safety device of claims 4, 5, 16, 17, and 29 operates in the event of unusual conditions to

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assure that no harm or danger can occur. The Specification, at page 10, lines 8-15 discloses that the safety device may override a thermostat. Applicants submit that a thermostat which merely regulates the operation of a heater to be within a user-set temperature range is not a safety device.

Thus, the combination of Hicks and Fiandt does not disclose or suggest a safety device.

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For the foregoing reasons, Applicants request withdrawal and reconsideration of the rejection.

Claims 7, 14, 18, 19, 31 and 35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hicks in view of U.S. Patent No. 3,575,582 to Covault. Applicants respectfully traverse the rejection.

Claims 7 and 14 depend from claim 1. Claims 18 and 19 depend from claim 15. Claims 31 and 35 depend from claim 27. Applicant submits that the combination of Hicks and Covault does not disclose or suggest the invention of claims 1, 15 and 27 for the reasons discussed above with respect to Hicks. Therefore, Applicants submit that claims 7, 14, 18, 19, 31 and 35 are patentable over the combination of Hicks and Covault for at least the same reasons as their respective base claims.

Claims 12, 21, 26, 38-47 and 50-57 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hicks in view of U.S. Patent No. 3,775,590 to Gartner. The Examiner contends that Gartner discloses an electric heater having a power of 1400-1700 watts. Applicants respectfully traverse the rejection.

Claim 12 depends from claim 1. Claims 21 and 26 depend from claim 15.

Applicant submits that the combination of Hicks and Gartner does not disclose or suggest the invention of claims 1 and 15 for the reasons discussed above with respect to Hicks. Therefore, Applicants submit that claims 12, 21 and 26 are patentable over the combination of Hicks and Gartner for at least the same reasons as their respective base claims.

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Additionally, claim 12 recites the feature of "an electric heating element arranged for a heat output up to about 1500 Watts." In contrast to a heat output wattage, Gartner discloses heaters operating "at line voltages of about 120 volts, and wattages of the order of about 1,400-1,700 watts." (Gartner, column 3, lines 38-40.) Gartner also discloses "the heater can raise the temperature of air passing through it from about 70° to about 150°F. when operating at 1,500 watts." (Gartner, column 3, lines 61-63.) Gartner merely discloses the input line voltages and the power consumed by an electric heater and does not disclose the heat output wattage of the heater. Thus, the combination of Hicks and Gartner does not disclose or suggest the amount of heat output generated by an electric heater as recited in claim 12. Therefore, Applicants submit that claim 12 is patentable over the combination of Hicks and Gartner.

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Similar to claim 12, claims 21, 26, 38 and 39-47 recite heat output levels for the electric heater and Applicants submit that for the foregoing reasons claims 21, 26, 38 and 39-47 are patentable over the combination of Hicks and Gartner. Claims 50-57 depend from claim 39, and Applicants submit that claims 50-57 are patentable over the combination of Hicks and Gartner for at least the same reasons as claim 39. Therefore, Applicants request withdrawal and reconsideration of the rejection.

Claims 48 and 49 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hicks in view of Gartner and Fiandt. Applicants respectfully traverse the rejection.

Claim 48 recites the feature of a "safety device that causes the heating element to reduce heat output when an overheat condition is detected" and claim 49 recites the feature of "the safety device comprises one of a bimetal strip, a thermistor and a thermal fuse." Applicants submit that, for reasons previously discussed with respect to the cited references, the combination of Hicks, Gartner, and Fiandt does not disclose or suggest the invention of claims 48 and 49. Additionally, claims 48 and 49 depend from claim 39, and Applicants submit that claims 48 and 49 are patentable over the combination of Hicks, Gartner, and Fiandt for at least the same reasons as claim 39. Therefore, withdrawal and reconsideration of the rejection is requested.



CONCLUSION

Each and every point raised in the Office Action dated August 5, 2003 has been addressed on the basis of the above amendments and remarks. In view of the foregoing it is believed that claims 1-57 are in condition for allowance and it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

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Respectfully submitted,

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